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September 14, 2017 17:00 ET

HURRICANE IRMA MANAGEMENT REPORT

Information contained in this report reflects HQ and regional reporting from the most recently completed operational period as well as other reports provided by HQ, regional and interagency sources.

National Incident Management Objectives

Objective 1: Ensure that health and safety of the EPA response is considered at all times.

Objective 2: Establish an incident management structure and processes employing the Incident Command System to enable effective overall management of the event with deployment of resources (staff and equipment) in a rapid, aggressive and well-coordinated manner.

Objective 3: Ensure prompt Review and Processing of Fuel Waiver requests.

Objective 4: Prepare for and provide Rapid Assessment of Industrial facilities as requested by the State or under EPA's statutory program responsibilities for CERCLA Superfund, RMP and FRP facilities. Working with our state partners, contact industrial sources within the impacted area to determine their operational status and determine what support can be provided with the monitoring of the start-up of industrial sources.

Objective 5: Prepare for and provide Rapid Assessment & Technical Assistance Drinking Water & Wastewater facilities as requested by the State or local government. EPA will support our state partners in contacting drinking water and waste water systems.

Objective 6: Prepare a Sustained Response Plan that outlines the resource and equipment needs for a long duration response.

Objective 7: Activate the Agency's Crisis Communication Plan to insure effective and efficient coordination of all incident communications.

Objective 8: Encourage a collaborative federalism approach, where national, state and local governments interact cooperatively and collectively to solve common problems.

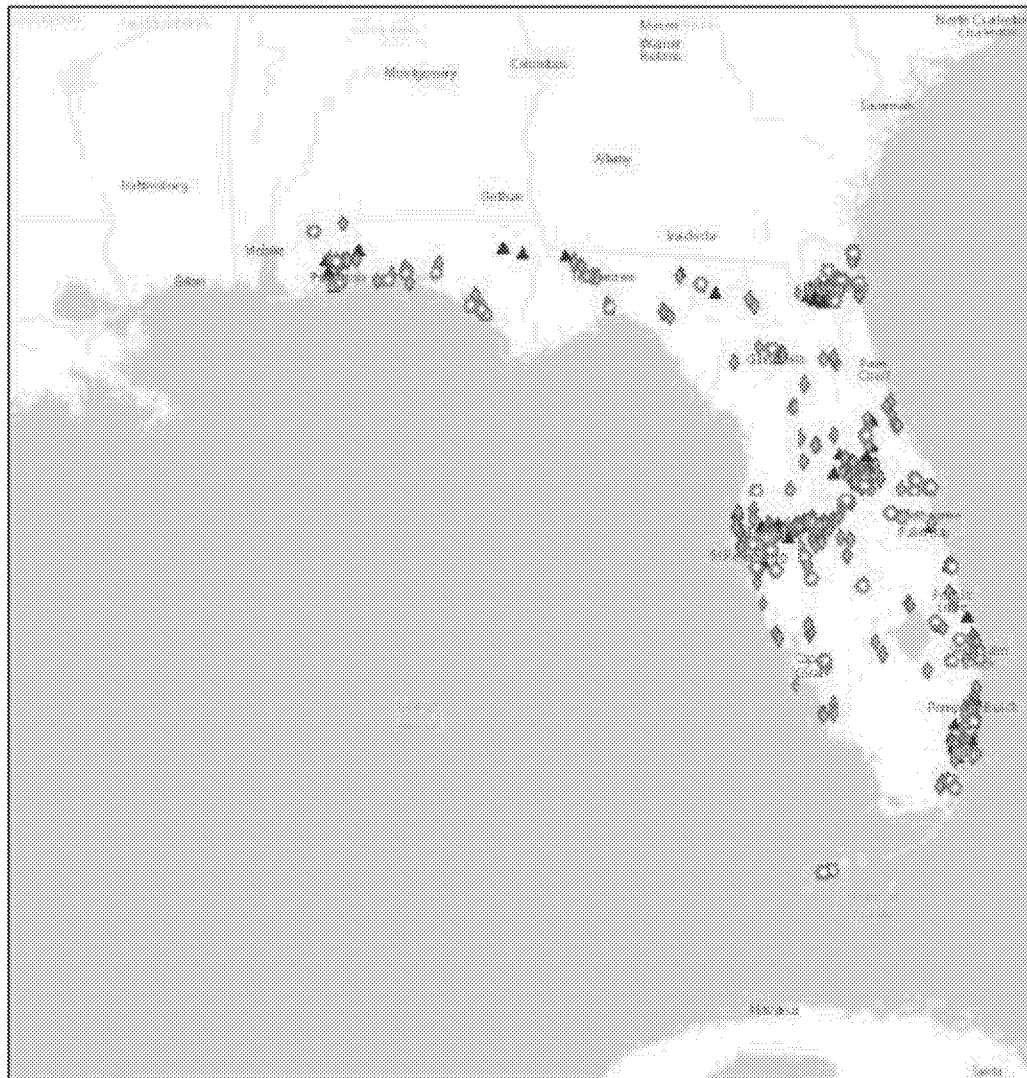
Objective 9: Begin Agency internal and external coordination, under the National Disaster Recovery Framework, regarding Recovery Support Functions in which EPA is likely to be involved.

Executive Summary

- Hurricane Irma weakened and is now a Post-Tropical Cyclone.
- On September 13th, EPA issued a letter to the Florida Department of Environmental Protection (DEP) providing certainty to Florida DEP that EPA will not pursue enforcement action over post-Irma storm water discharges at facilities with National Pollution Discharge Elimination System (NPDES) permits.
- The Florida State Emergency Operation Center (FSEOC) started assessment of 194 priority facilities. The list is composed of a combination of facility types (e.g., Facilities Response Plan and Risk Management Plan).
- On September 12th, the Region 4 (R4) Superfund Remedial Division (SFD) deployed six teams to Florida to conduct rapid assessment at all National Priority List (NPL) sites within the State. R4 conducted rapid assessments on September 13th. Two sites require follow-up.
- EPA discussed debris management, landfill issues, and debris burning with the President of the Puerto Rico Environmental Quality Board (PREQB)/Secretary of the Department of Natural and Environmental Resources (PR DRNA) as well as with the Director of the Puerto Rico Solid Waste Management Authority (SWMA). EPA coordinated with the Florida Department of Environmental Protection (FDEP), Florida Department of Transportation (FDOT), FEMA, and the United States Corps of Engineers (USACE) concerning the development and implementation of a Debris Management Plan. Key issues discussed were: the management of hazardous waste, household hazardous waste and asbestos; air curtain incinerators; tribal concerns; and environmental justice areas.
- On September 10th, EPA issued a No Action Assurance (NAA) letter for all Florida power plant facilities in response to an emergency request for Hurricane Irma related relief. EPA continues to exercise enforcement discretion not to pursue enforcement for violations of Title V and/or NPDES permit requirements at electric generating units, located in the State of Florida. The NAA terminates at 23:59 on September 26th.
- On September 13th, EPA issued a NAA letter to allow Duke Energy diesel reserves to be used for on-road response vehicles where the engines have been certified that this fuel will not cause damage. The No Action Assurance is issued through September 22nd.

The maps below, from left to right are from the R4 Situation Report (17:00, September 13th) and the FEMA Senior Leadership Briefing Post-Tropical Cyclone Irma (05:00, September 14th) and represent priority sites and potential for continued flooding.

Hurricane Irma Emergency Response - FRP and RMP facilities and NPL Sites



September 12, 2017

Priority Facilities

FRP

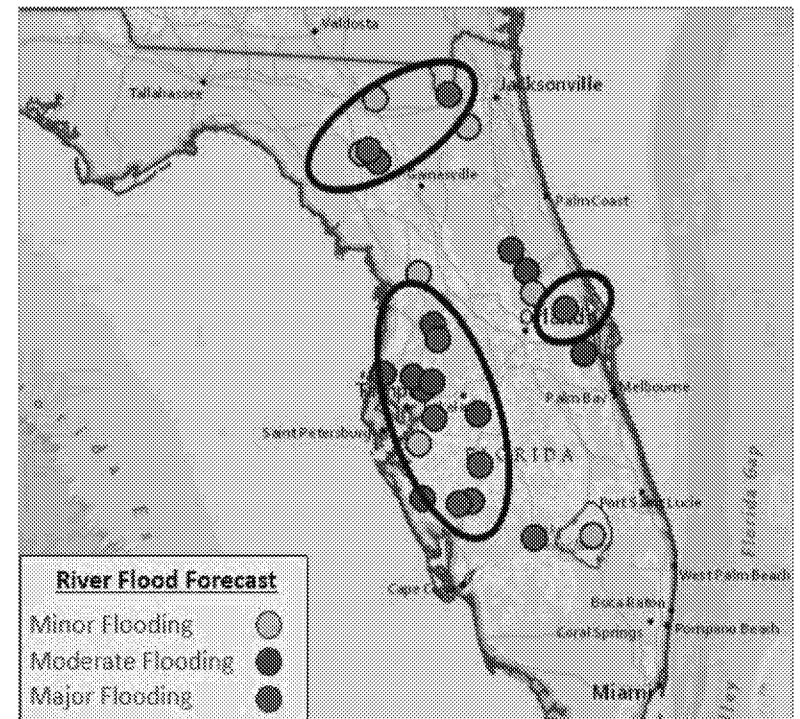
Priority Facilities

RMP

Priority Facilities

Superfund NPL

1:4,622,324



Regional Mission Assignments and Funding

- R2 received a \$10M mission assignment for disaster assistance under ESF-10.
- R4 received a \$9M mission assignment for disaster assistance under ESF-10.

Mission Assignment Number	Funding Amount	Description of Assignment
VI-17090102-EPA-01	\$10,000	ESF-10 support of the FEMA's RRCC in Colts Neck, NJ
PR-17090102-EPA-01	\$20,000	Activate EPA to FEMA R2 RRC and other locations as necessary for PR (pre-landfall)
4335DR-VI-EPA-01	\$100,000	Activate EPA to FEMA R2 RRC in Colts Neck, NJ to support FEMA response ops
3383EM-VI-EPA-01	\$75,000	Activate EPA to FEMA RRCC, JFO, EPA REOC, State EOC, PDA and NRA Teams and other coordination venues to support FEMA response ops in VI
4335DR-VI-EPA-02	\$508,000	To perform assessment of oil and hazardous materials releases, contaminated debris and other environmental events following landfall in USVI
3384EM-PR-EPA03	\$508,000	To perform assessment of oil and hazardous materials releases, contaminated debris and other environmental events following landfall in PR
3384EM-PR-EPA-01	\$75,000	Activate EPA to FEMA R2 RRCC, EPA REOC, State EOC, JFO, PDA, and RNA Teams and other coordination venues to support FEMA response in PR
FL-17083101-EPA-01	\$35,000	Activate Environmental Protection Agency (EPA) ESF-10 support to the FEMA Region IV Regional Response Coordination Center (RRCC)
3385EM-FL-EPA-01	\$525,000	Activate Federal Hazardous Assessment Response Team w/appropriate resource support to conduct assessments at hazardous substances within R4
3385EM-FL-COE-SAD-10	\$150,000	Federal Operations Support
4335DR-VI-EPA-04	\$10,000,000	Conduct oil and hazardous materials field operations, including cleanup and disposal of hazardous materials and oil, and response to orphaned containers in order to mitigate actual and potential threats to public health and safety. Response includes household hazard waste collection and disposal, monitoring of immediate threats to public health/safety and the environment, and staging, segregation, transportation and disposal of oil and hazardous substances.
4337DR-FL-EPA-04	\$9,000,000	Provide oil and hazardous material field response in support of FEMA response operations. Field response activities may include the following: providing specialized expertise, conducting damage assessment of oil/hazmat waste impact via air land or water; contractor oversight; evaluating hazards; and/or response, removal, or disposal of: actual and potential oil discharges, and releases of hazardous substances, pollutants and contaminants and remove pollutants from vessels in or upon navigable waters and adjoining shorelines.
Total Funds	\$21,006,000.00	

Number of Regional Personnel Involved in Response

Type	R2 Personnel	R4 Personnel	Total Regional Personnel
EPA	88	59	147
Contractors	11	13	24
Totals	99	72	171

Region 2 Significant Activities:

- EPA Region 2 (R2) was activated by FEMA to respond to Hurricane Irma's impacting the USVI and Puerto Rico. EPA is part of Emergency Support Function-10 (ESF-10) and EPA personnel have deployed to St. Thomas, St. Croix and St. John in the USVI, and Puerto Rico, including the islands of Vieques and Culebra.
- The R2 REOC is activated with an Incident Command System (ICS) structure in place. R2 has activated the Regional Incident Coordination Team (RICT).
- R2 EPA and contractor personnel teams have deployed to both Puerto Rico and the USVI. Teams will focus on assessing any immediate threats from hazardous substance releases and oil spills, orphan hazardous containers, household hazardous waste, contaminated debris, and drinking water/wastewater (DW/WW) issues. USVI Waste Management Authority (USVIWMA) issued a notice to residents in St. Thomas to bring debris to landfills. Five debris staging sites have been identified.
- EPA assessment teams have completed their assessments of Superfund and oil sites in Puerto Rico and in the U.S Virgin Islands with the exception of two sites.
- EPA Criminal Investigation Division (CID) and National Criminal Enforcement Response Team (NCERT) special agents were deployed to the USVI to provide law enforcement support to EPA R2 On-Scene Coordinators (OSCs) conducting environmental assessments.
- EPA OSCs are conducting field assessments in Puerto Rico. OSCs are also mobilized to the USVI to conduct environmental assessments.
- EPA is conducting debris assessments and coordinating with USACE, FEMA, and the USCG to develop debris plans with Puerto Rico and USVI. Debris Assessment Teams were deployed in both Puerto Rico and the USVI. In addition, the teams continue to focus on assessing potentially contaminated debris at oil and chemical fixed facilities.

Superfund and Oil Sites:

EPA assessment teams have completed their assessments of Superfund and oil sites in Puerto Rico and in the USVI with the exception of two sites below.

- Guayanilla Bay (PR) oil spill is a sub-surface oil plume that has discharged oil through a storm sewer line in the past. The storm sewer has been secured as part of the original oil spill response. No oil spills have been reported from this site.
- The Cruz Bay Oil Tank (St. John) site involves an oil storage tank where the oil has been removed with the exception of oil sludge in the bottom of the tank. The tank was damaged during the storm but overflights of the area have not shown any oil spills from the site. The site will be addressed once access is possible.

SUPERFUND SITES (NPL, Removal and Oil)						
Puerto Rico						
Site	Type	Phase 1	Phase 2		Phase 3	All Phases Completed
		Post-Storm Assessment	Site Inspection Needed	Inspected	Additional Response Action	
Guayanilla Bay Oil Spill*	Oil Response	-----	No	N/A	No	-----
U.S. VIRGIN ISLANDS						
Cruz Bay Oil Tank**	Oil Response	09/11/17	Yes	video	No	-----

*Guayanilla Bay Oil Spill is a pre-storm OPA remediation site being addressed by an OSC.

**Cruz Bay Oil Tank is a pre-storm OPA remediation site being addressed by an OSC. Recent amateur video shows this tank has partially collapsed onto itself, but there was no release because the contents are semi-solid.

Regulated Facilities

- One regulated facility had damage to security and air monitoring equipment presenting a potential health risk to workers as well as the businesses. Ruptured chlorine tanks at the site have also been identified. The Fixed Facilities Assessment Team (FFAT) Leader is in communication with PRASA personnel.

PUERTO RICO

Facility Type	Sites Identified	Pre-Storm Remote Assessment	Post Storm Remote Assessment	Post Storm Field Assessment	Follow-up Action Required
RMP	56	56*	53*	2	0
FRP	22	22*	21*	0	0
SPCC (non-FRP)	232*	232**	15*	3	0
Total	310*	310*	89*	5	0

* Pre-Hurricane email requested facilities to self-identify any pre-existing compromised conditions (construction at process areas, tank maintenance, etc.). No facilities reported pre-existing compromised conditions.

Based on Post-Hurricane oil spill/chemical release/damage assessment email and phone calls. No facilities have reported oil spills, chemical releases, or upset/damage conditions that could lead to oil spill or chemical release.

* This number reflects the number of known non-FRP SPCC facilities believed to be active.

U.S. VIRGIN ISLANDS

Facility Type	Sites Identified	Pre-Storm Assessment	Post Storm Assessment	Post Storm Field Assessment	Follow-up Action Required
RMP	1	1*	1*	1	0
FRP	6	6*	6*	2	0
SPCC (non-FRP)	57*	57**	8*	7	0
Total	64*	64*	15*	9	0

* Pre-Hurricane email requested facilities to self-identify any pre-existing compromised conditions (construction at process areas, tank maintenance, etc.). No facilities reported pre-existing compromised conditions.

Based on Post-Hurricane oil spill/chemical release/damage assessment email and phone calls. No facilities have reported oil spills, chemical releases, or upset/damage conditions that could lead to oil spill or chemical release.

* There is no SPCC submission requirement. This number reflects the number of known non-FRP SPCC facilities that are believed to be active based on inspection history.

Drinking Water / Wastewater (DW/WW) Assessments:

Puerto Rico Drinking Water Status: As of 11:00 on September 13th, R2 estimates 3.03% of households are without drinking water services from PRASA. PR remains under a boil water notice. Puerto Rico Department of Health (PRDOH) is back to functionality and is going to start the coordination of inspections to check operational status of the drinking water systems. Water Support Group in the REOC is coordinating with PRDOH in order to avoid duplication of effort.

Non-PRASA Systems: EPA continues to assist PRDOH in contacting the Non-PRASA systems. Non-PRASA sites which have not answered phone calls will be visited by Caribbean Environmental Protection Division (CEPD) starting September 14th.

USVI Drinking Water Status: Boil water notices were issued for Saint Thomas and Saint John. Chlorination system is up and running. St. Croix is currently under a drinking water advisory. St. Croix has a fully functional testing lab.

USVI Department of Planning and Natural Resources (DPNR) reports (based on limited information) that are under a Boil Water advisory. Some of the drinking water storage tanks in St. Thomas survived the storm. VIWAPA expects to commence gravity feeding drinking water on St. Thomas.

PR Drinking Water Priorities: The PR water desk is working with PRDOH and PRASA to prioritize federal assistance for drinking water facilities and essential parts of the drinking water distribution system for repair.

System ID	Name	Population Served	Status
PR0666056	La Cuchilla	400	No power - need a generator
PR0523105	Acueducto Dona Elena	1016	Assessment pending
PR0604046	Mulitas Centro	1000	Assessment pending
PR0613046	Turabo Arriba	1200	Assessment pending
PR0613366	Acueducto Sector La Sierra	2100	Assessment pending
PR0677016	Acueducto Rural Tejas	2460	Assessment pending
PR0677146	Calabazas Arriba	1800	Assessment pending

U.S. Virgin Islands: DPNR reports that all St. Croix drinking water and wastewater facilities are fully functional. On September 13th, the CEPD requested that OSCs deploy to St. Thomas to assess the wastewater treatment plants and pump stations. St. Thomas laboratory is currently offline due to lack of power and needs a generator. There is no information available on the drinking water and wastewater situation in St. John. USVIWMA reported 6 of 8 municipal wastewater treatment plants are in service. The only facility not in service is Vessup on St. Thomas. WMA indicated that 4 of the 15 sanitary pump stations in St. Thomas and St. John are not in service. On September 13th, CEPD requested OSCs to deploy in St. Thomas and St. John to assess the wastewater treatment plants and pump stations.

Environmental Unit:

The EU continues to prepare for potential sampling activities once the branch teams in PR and the USVI complete their reconnaissance activities.

Region 4 Significant Activities:

Superfund and Oil Sites:

- The R4 Emergency Response program coordinated the removal of three drums at Anodyne, Inc. Superfund Site containing Investigation Derived Waste (IDW) generated during a recent sampling event.
- On September 13th, the R4 SFD group deployed six teams to Florida to conduct rapid assessment at all NPL sites within the State. Three additional NPL Rapid Assessment Teams are deploying to Georgia and South Carolina to conduct rapid assessments at all NPL sites. Rapid assessments of NPL sites began on September 13th. 30 of 90 total sites were assessed. Two sites require follow-up:
 - Fairfax Wood Treating in Jacksonville: Due to heavy rain, some runoff concerns were identified at an on-site retention point, and a washout underneath some site fencing. Crews are being mobilized to address the washout and samples that will be collected from the pond to determine whether contamination issues are present/absent.
 - US Navy Air Station Cecil Field, Jacksonville: Due to flood, the air-sparging unit had a compressor failure; a contractor is currently working to repair the unit.
- In Georgia - 10 of 35 sites were assessed on September 13th. No issues identified or follow up required at this time.
- South Carolina - 9 of 22 sites assessed on September 13th. No issues identified or follow up required at this time.

Drinking Water / Wastewater (DW/WW) Assessments:

- The EPA R4 WPD received funding totaling \$75,000 under an ESF-3 MA sub-task to support the USACE drinking water and wastewater facility assessments. The request specified providing three technical experts for 14 days. WPD teams are in Tallahassee are conducting assessments.
- The WPD compiled an inventory of community drinking water systems (CWS) and publicly owned wastewater treatment plants (POTW) to be used for post-storm damage assessment within R4.
- The EPA continued to coordinate with the FDEP and the USACE relative to Water and drinking water issues. Additionally, the USACE has indicated they may request R4 assistance with sampling activities associated with bringing the water/ drinking water facilities back on line.
- Initial reports from Georgia water and wastewater systems indicate that six community-water systems are without power or on back-up generators. Three Publicly Owned Treatment Works (POTW) are reported as being without power or partially operating on back-up generators. Approximately 10 counties are under a boil advisory.
- EPA R4 WPD compiled an inventory of community drinking water systems (CWS) and POTW that may be used during post storm damage assessment in Florida:

	Large CWS (Over 3,300)		Small CWS (under 3,300)	
	# Systems	Population Served	# Systems	Population Served
Operational	338	18,247,738	496	386,091
Partially Operational	20	595,307	24	24,453
Non Operational	1	3,894	132	36,304
Unknown	23	434,627	601	271,114
Totals	382	19,281,566	1,253	717,961

*Operational: Facility producing safe*** drinking water for greater than 90% of customers under normal operating conditions*
*Partially Operational: Facility producing safe*** drinking water under adverse conditions and/or supplying less than 90% of customers*
*Non Operational: Facility not producing or supplying safe*** drinking water*
Unknown: Status of facility unknown at this time
 *** Safe Drinking Water is defined as water that satisfies all State & Federal requirements.

	NPDES Permitted Facilities		State Permits (Non-NPDES)
	POTW	Non-POTW (Industrial)	
Operational	89	73	172
Partially Operational	7	2	40
Non Operational	0	7	87
Unknown	48	159	1,523
Totals	144	240	2,021

Comments: Data is compiled from the State of Florida's Storm Tracker System. The NPDES universe tracked in Storm Tracker represents a subset of the total inventory of NPDES permitted systems that are identified by the State of Florida as the most critical facilities for operational status determination following a hurricane event.

Operational: Facility & associated collection system is properly conveying and effectively providing wastewater treatment, in accordance with applicable permit conditions and regulations. (Operating on full or backup generator power.)
Partially Operational: Facility and/or associated collection system is properly conveying and providing wastewater treatment at or near operational capacity, i.e. one or more treatment train components are non-operational, one or more lift stations are non-operational, etc.
Non Operational: Facility and/or associated collection system is not providing wastewater treatment in accordance with applicable permit conditions and regulations.
Unknown: Status of facility unknown at this time.

Regulated Facilities:

- Georgia Environmental Protection Division (EPD) notified Region 4 that the 275 RMP facilities in Georgia have not been impacted. In addition, Alabama Department of Environmental Management (ADEM) notified Region 4 that the 195 RMP facilities in Alabama have not been impacted.

Drinking Water	WWTP	NPL	RMP	FRP
1,641	386	90	263	122

Notes:

WWTP – Wastewater Treatment Plant

NPL – National Priority List sites

FRP – Facility Response Plan facilities

RMP – Risk Management Plan facilities

EPA Headquarters Significant Activities:

The HQ EOC is activated to Level 1 in support of the R2 and R4 responses to Hurricane Irma. The HQ EOC is coordinating on several levels with R2, R4, and other Federal agencies. The HQ EOC has deployed personnel to the FEMA NRCC to staff the ESF #10 desk. EPA Senior Management that comprise the Policy Coordination Committee (PCC) developed and issued senior management objectives that form the basis of field strategy and tactics in response to Irma.

Personnel	AO	OAR	OCFO	OCSP	OECA	OEI	OGC	OLEM	OP	ORD	OW	ATSDR	Totals
Employees	1	0	0	0	4	1	1	14	1	1	1	1	25
Contractors	0	0	0	0	0	4	0	3	0	0	0	0	7
TOTAL	1	0	0	0	4	5	1	17	1	1	1	1	32

Other EPA Activities:

Fuel Waivers:

EPA continues to review requests for fuel waivers as needed. On September 13th EPA approved a request from the State of Texas to continue to waive requirements for fuels in Texas through the end of the month to help address the emergency circumstances in Texas from Hurricanes Harvey and Irma.

OECA Civil/CID:

- On September 13th, EPA issued a No Action Assurance letter to allow Duke Energy diesel reserves to be used for on-road response vehicles where the engines have been certified that this fuel will not cause damage. The NAA is issued through September 22nd.
- On September 10th, EPA issued a NAA letter for all Florida Power Plant facilities in response to the emergency request for Hurricane Irma related relief. EPA will exercise its discretion not to pursue enforcement for violations of Title V and/or NPDES permit requirements at electric generating units located in the State of Florida. The NAA terminates at 23:59 on September 26th.
- On September 10th EPA exercised its enforcement discretion for Tampa Electric Company to operate without meeting all pollution controls at three of its facilities in order to maintain the supply of electricity to customers and critical facilities in Florida and to facilitate the expeditious restoration of lost electrical service caused by Hurricane Irma. EPA believes that the exercise of enforcement discretion in these circumstances is in the public interest and will help address the emergency circumstances in Florida.
- EPA CID has deployed 12 EPA CID and NCERT special agents to the USVI to provide law enforcement support to EPA R2 OSCs conducting environmental assessments on the islands.

Communications:

- On September 13th, EPA issued a letter to the Florida Department of Environmental Protection (DEP) providing certainty to Florida DEP that EPA will not pursue enforcement action over post-Irma storm water discharges at facilities with National Pollution Discharge Elimination System (NPDES) permits. The press release and correspondence are available at: <https://www.epa.gov/newsreleases/epa-provides-certainty-florida-dep-over-stormwater-discharges-facilities-impacted>.
- On September 12th, EPA issued a press release with updated information regarding Agency response to Hurricane Irma, it is available at: <https://www.epa.gov/newsreleases/epa-irma-update-tuesday-september-12-2017>.
- The HQ EOC Public Information Office is working with OLEM to develop fact sheets to inform people about issues related to returning after the storms. Topics covered include: household hazardous waste, construction debris, etc.
- Two Community Involvement Coordinators (CIC) deployed to PR on September 11th, and two CICs deployed to the USVI on September 12th.
- The Hurricane Irma website is live at <https://www.epa.gov/hurricane-irma>.